AUDIT REPORT FOR URUGUAY

JUNE 17 THROUGH JULY 7, 2000

April 30, 2001

INTRODUCTION

Background

This report reflects information that was obtained during an audit of Uruguay's meat inspection system from June 17 through July 7, 2000. Nine of the twenty-three establishments certified to export meat to the United States were audited. They were as follows: Ests. 677, 344, 12, 7, 8, 379, 2, 14, and 3. All of these were slaughter establishments.

The last audit of the Uruguay meat inspection system was conducted in January and February 1999. Twelve establishments were audited: ten were acceptable (135, 158, 10, 7, 8, 52, 104, 439, 55 and 701), one was evaluated as acceptable/re-review (12), and one was unacceptable (2) One system failure was reported at that time: HACCP-implementation was deficient in three of the six establishments visited. During this new audit two of the establishments were included in the new itinerary. Some of the major concerns from the previous audit were:

- 1. The addressing of zero tolerance.
- 2. Condensation falling on product.
- 3. Sub-standard temperature in sanitizers.
- 4. Ineffective corrective actions (trimming).
- 5. Common contact points for exposed carcasses.
- 6. Neglected cleaning above product and product handling areas.
- 7. Inadequate separation of inedible product containers from edible product equipment.
- 8. No back-flow devices on submerged water lines.
- 9. No letter of documentation for hand soap.
- 10. Pest control programs did not note the degree of rodent activity.
- 11. Port-of-entry violations by some establishments.

On this audit two establishments were listed as acceptable/re-review, Ests. 12 and 14, all others were acceptable.

Fresh beef and cooked or canned product of all species is allowed to be exported into the U. S. at the present time.

During calendar year 2000, Uruguay establishments exported over 1.8 billion pounds of beef and 233,000 pounds of mutton and lamb to the U.S. Port-of-entry rejections were for contamination (0.002%), pathological defects (0.003%), and transportation damage and missing shipping marks (0.2% combined).

PROTOCOL

This on-site audit was conducted in four parts. One part involved visits with Uruguay national meat inspection officials to discuss oversight programs and practices, including enforcement activities. The second entailed an audit of a selection of records in the meat inspection headquarters facilities following the on-site visits. Establishments were selected for on-site visits and for records audit by the results of previous audits, by analysis of the volume of export, rejection cause and rate and some were selected randomly. The third was conducted by on-site visits to establishments. The same method was also used for the selection of records only audits. The fourth was a visit to a laboratory that performs analytical testing of field samples for the national residue testing program, and the culturing of field samples for the presence of microbiological contamination with *Salmonella*.

Program effectiveness determinations focused on five areas of risk: (1) sanitation controls, including the implementation and operation of Sanitation Standard Operating Procedures (SSOPs), (2) animal disease controls, (3) residue controls, (4) slaughter/ processing controls, including the implementation and operation of Hazard Analysis and Critical Control Point (HACCP) systems and the *E. coli* testing program, and (5) enforcement controls, including the testing program for *Salmonella* species. Uruguay's inspection system was assessed by evaluating these five risk areas.

During all on-site establishment visits, the auditor evaluated the nature, extent, and degree to which findings impacted on food safety and public health, as well as overall program delivery. The auditor also determined if establishment and inspection system controls were in place. Establishments that do not have effective controls in place to prevent, detect and eliminate product contamination/adulteration are considered unacceptable and therefore ineligible to export products to the U.S., and are delisted accordingly by the country's meat inspection officials.

RESULTS AND DISCUSSION

Summary

Effective inspection system controls were found to be in place in seven of the nine establishments audited; two (12 and 14) of these were recommended for re-review. Details of audit findings, including compliance with HACCP, SSOPs, and testing programs for *Salmonella* and generic *E. coli* are discussed later in this report.

As stated above, deficiencies had been identified during the last audit of the Uruguay meat inspection system, conducted in January 1999. During this new audit, the auditor determined that the deficiencies had been addressed and corrected.

HACCP-implementation deficiencies had been found in one of the twelve establishments visited (Est. 2) in the 1999 audit. During this new audit, implementation of the required HACCP programs was now found to be adequate in all of the nine establishments visited. Details are provided in the Slaughter/ Processing Controls section later in this report.

Entrance Meeting

On June 20, an entrance meeting was held at the Montevideo offices of the Uruguay Ministerio de Ganaderia, Agricultura y Pesca (MGAP), and was attended by Dr. Hector Lazaneo, MGAP Director; Dr. Ramon Cardinal, MGAP Deputy Director; Dr. Ronald Deutsch, Chief, Department of Slaughter, Dr. Jorge Armstrong, Director de Dato Tecinco; Dr. Mario Serna Altesor, Director Estab. Ind.; Mr. Servio Sallva, Chief Departmento Control Com. Inter.; Dr. Victor Lyford Pike, Director of Laboratory; and Dr. M. Douglas Parks, International Audit Staff Officer, USDA, FSIS. Topics of discussion included the following:

- 1. Compliance and enforcement.
- 2. Inspection service training.
- 3. Various requests from USDA, e.g. species testing, residue questionnaire, delistment and relistment policy and methodology, micro-testing and laboratory responsibilities.
- 4. On-site visits.
- 5. Establishment records audit in the central office.
- 6. Itinerary.

Headquarters Audit

There had been no changes in the organizational structure or upper levels of inspection staffing since the last U.S. audit of Uruguay's inspection system in January 1999.

To gain an accurate overview of the effectiveness of inspection controls, FSIS requested that the audits of the individual establishments be led by the inspection officials who normally conduct the periodic reviews for compliance with U.S. specifications. The FSIS auditor (hereinafter called "the auditor") observed and evaluated the process.

The auditor conducted a review of inspection system documents pertaining to the establishments listed for records reviews. This records review was conducted at the headquarters of the inspection service. The records review focused primarily on food safety hazards and included the following:

- Internal review reports.
- Supervisory visits to establishments that were certified to export to the U.S.
- Training records for inspectors and laboratory personnel.
- Label approval records such as generic labels, and animal raising claims.
- New laws and implementation documents such as regulations, notices, directives and guidelines.
- Sampling and laboratory analyses for residues.

- Pathogen reduction and other food safety initiatives such as SSOPs, HACCP. programs, generic *E. coli* testing and *Salmonella* testing.
- Sanitation, slaughter and processing inspection procedures and standards.
- Control of products from livestock with conditions such as tuberculosis, cysticercosis, etc., and of inedible and condemned materials.
- Export product inspection and control including export certificates.
- Enforcement records including examples of criminal prosecution, consumer complaints, recalls, seizure and control of non-compliant product, and withholding, suspending, withdrawing inspection services from or delisting an establishment that is certified to export product to the United States.

No concerns arose as a result the examination of these documents.

Government Oversight

All inspection veterinarians and inspectors in establishments certified by Uruguay as eligible to export meat products to the United States were full-time MGAP employees, receiving no remuneration from either industry or establishment personnel.

Establishment Audits

Twenty-three establishments were certified to export meat products to the United States at the time this audit was conducted. Nine establishments were visited for on-site audits. In seven of the nine establishments visited, both MGAP inspection system controls and establishment system controls were in place to prevent, detect and control contamination and adulteration of products. In the other two establishments the following deficiencies were noted; these two were rated as acceptable/re-review:

Establishment 12

- 1. Packaged product chain conveyor rollers had residues from previous day's uses.
- 2. The evisceration table was coming up for reuse with residues of previous uses.
- 3. The floor in the knocking box was not level and each animal fell to its knees before stunning.
- 4. Over-spray from the carcass wash was dripping from overhead structures, not cleaned and sanitized daily, onto exposed carcasses.
- 5. Ingesta were observed in the head meat in the offal-packing department.
- 6. Heavy condensate was observed on the ceiling above the carcass skinning area.
- 7. The carcass-quartering elevator, ready for use, contained residues from previous day's uses.

SSOP. Procedures for operational sanitation are included in the GMP and it is very confusing.

HACCP. The critical limit set for temperature did not have a time requirement or limit.

Establishment 14

- 1. Feces were found on a carcass in the boning room and on several carcasses presented at the pre-trim station at the boning room.
- 2. Condensate was dripping onto carcasses in the hallway above a trim station.
- 3. A pile of feces (unknown source) was on the floor in the box room. The evisceration table was coming up with residues from the previous use.
- 4. Over-spray from the carcass wash was dripping from overhead structures, not cleaned and sanitized daily, onto exposed carcasses.

HACCP. The person monitoring the CCP for feces in the slaughter department was not recording feces being present when actually it was in abundant evidence.

All of these deficiencies, in both establishments, were corrected immediately by establishment and/or inspection personnel.

Laboratory Audits

During the laboratory audits, emphasis was placed on the application of procedures and standards that were equivalent to U.S. requirements. Information about the following risk areas was also collected:

- 1. Government oversight of accredited, approved, and private laboratories.
- 2. Intra-laboratory quality assurance procedures, including sample handling.
- 3. Methodology.

The Division Laboratoros Veterinarios (DI.LA.VE.) also known as the Rubino Lab. in Monteviedo was audited on June 27, 2000.

Except as noted below, effective controls were in place for sample handling and frequency, timely analysis, data reporting, tissue matrices for analysis, equipment operation and printouts, minimum detection levels, recovery frequency, percent recoveries, and corrective actions. The methods used for the analyses were acceptable. No compositing of samples was done.

Uruguay's microbiological testing for *Salmonella* was being performed in government laboratories. One of these, the Rubino Laboratory in Montevideo, was audited and found to be acceptable.

- 1. The laboratory was approved, staffed and operated by the government.
- 2. The laboratory had properly trained personnel, suitable facilities and equipment, a written quality assurance program, and reporting and record-keeping capabilities.
- 3. Results of analyses were being reported to the government or simultaneously to the government and establishment.

Establishment Operations by Establishment Number

The following operations were being conducted in the nine establishments:

Beef slaughter and boning - nine establishments (677, 344, 12, 7, 8, 379, 2, 14, and 3) Mutton and Lamb slaughter and processing-six establishments (677, 344, 7, 379, 14, and 3)

SANITATION CONTROLS

Based on the on-site audits of establishments, Uruguay's inspection system had controls in place for water potability records; chlorination procedures; back-siphonage prevention; hand washing facilities; sanitizers; separation of operations; pest control and monitoring; temperature control; lighting; work space; ventilation; maintenance and cleaning of over-product ceilings and equipment; dry storage areas; personal dress, habits, and hygiene; equipment sanitizing; and product handling and storage.

Sanitation Standard Operating Procedures (SSOPs)

Each establishment was evaluated to determine if the basic FSIS regulatory requirements for SSOPs were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment A).

The SSOPs were found to meet the basic FSIS regulatory requirements, with only occasional minor variations.

The sanitation deficiencies found in Est. 12 & 14 are found in the "Establishment Audit" section.

ANIMAL DISEASE CONTROLS

Uruguay's inspection system had controls in place to ensure adequate animal identification, ante-mortem and post-mortem inspection procedures and dispositions, condemned and restricted product control, and procedures for sanitary handling of returned and rework product.

There were reported to have been no outbreaks of animal diseases with public-health significance since the previous U.S. audit.

RESIDUE CONTROLS

Uruguay's National Residue Testing Plan for 2000 was being followed, and was on schedule. The Uruguay inspection system had adequate controls in place to ensure compliance with sampling and reporting procedures and storage and use of chemicals.

SLAUGHTER/PROCESSING CONTROLS

The Uruguay inspection system had controls in place to ensure compliance with requirements regarding animal identification; antemortem inspection and dispositions; humane slaughter; postmortem inspection and dispositions; condemned product control; pre-boning trim; boneless meat re-inspection; ingredients identification; formulations; packaging materials; label approvals; processing equipment and records; and post-processing handling.

HACCP Implementation

All establishments approved to export meat products to the U.S. are required to have developed and implemented a Hazard Analysis – Critical Control Point (HACCP) system. Each of these systems was evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment B).

The HACCP programs were found to meet the basic FSIS regulatory requirements. Minor exceptions are as follows:

- 1. In two establishments (344 and 3) the instrument used to measure critical limits was not calibrated.
- 2. Critical limits were not defined; they were left as a judgement in establishment 677.
- 3. The person who was monitoring a zero tolerance critical limit for feces was not always recording feces as it appeared on the carcasses in establishment 14.
- 4. The critical limit for feces was stated as more than zero in establishment 7.
- 5. The critical limit for carcass cooling had a target temperature but no time limit in establishment 12.
- 6. No preventative action was being recorded at establishment 8.

Testing for Generic E. coli

Uruguay has adopted the FSIS regulatory requirements for E. coli testing.

All of the establishments audited were required to meet the basic FSIS regulatory requirements for generic *E. coli* testing, and were audited and evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment C).

The *E. coli* testing programs were found to meet the basic FSIS regulatory requirements. Only one minor problem was seen in establishment 379 where the frequency of sampling was not in the program

Establishments had adequate controls in place to prevent meat products intended for Uruguay domestic consumption from being commingled with products eligible for export to the U.S.

ENFORCEMENT CONTROLS

<u>Inspection System Controls</u>

The MGAP inspection system controls [ante-and post-mortem inspection procedures and dispositions, control of restricted product and inspection samples, control and disposition of dead, dying, diseased or disabled animals, boneless meat re-inspection, shipment security, including shipment between establishments, prevention of commingling of product intended for export to the United States with domestic product, monitoring and verification of establishment programs and controls (including the taking and documentation of corrective actions under HACCP plans), inspection supervision and documentation, the importation of only eligible livestock or poultry from other countries (i.e., only from eligible countries and certified establishments within those countries), and the importation of only eligible meat or poultry products from other countries for further processing] were in place and effective in ensuring that products produced by the establishment were wholesome, unadulterated, and properly labeled.

In addition, adequate controls were found to be in place for security items, shipment security, and products entering the establishments from outside sources.

Testing for Salmonella Species

All of the establishments audited were required to meet the basic FSIS regulatory requirements for *Salmonella* testing, and were evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment D).

Uruguay has adopted the FSIS regulatory requirements for Salmonella testing.

The Salmonella testing programs were found to meet the basic FSIS regulatory requirements.

SPECIES VERIFICATION TESTING

At the time of this audit, Uruguay was not exempt from the species verification-testing requirement. The auditor verified that species verification testing was being conducted in accordance with FSIS requirements. In 1999, 1434 species verification tests were done on exports.

Monthly Reviews

These reviews were being performed by the Uruguay equivalent of Area Supervisors. All were veterinarians with many years of experience. Dr. Ronald Deutsch was in charge of the slaughter establishments.

The internal review program was applied equally to both export and non-export establishments. Internal review visits were usually announced a week in advance, and were

conducted, at times by individuals and at other times by a team of reviewers, at least once monthly, and sometimes several times within a month. The records of audited establishments were kept in the inspection offices of the individual establishments, and copies were also kept in the central MGAP offices in Montevideo, and were routinely maintained on file for a minimum of 3 years.

In the event that an establishment is found, during one of these internal reviews, to be out of compliance with U.S. requirements, and is delisted for U.S. export, before it may again qualify for eligibility to be reinstated, a team is empowered to conduct an in-depth review, and the results are reported to Drs. Hector Lazaneo and Deutsch for evaluation; they formulate a plan for corrective actions and preventive measures.

After observing the internal reviewers' activities in the field, the auditor was confident in their professionalism, thoroughness, and knowledge of U.S. requirements, and in the effectiveness of Uruguay's internal review program as a whole.

Enforcement Activities

The following things were discussed with a legal representative of MGAP and constitute the basics of the enforcement polices and procedures of Uruguay.

- 1. Meat inspection stops at the door of the production establishment, control then passes to Municipal Authorities.
- 2. No state plants only federal.
- 3. Meat violation cases are prosecuted by the Justice Department.
- 4. All enforcement activities are supported by the Federal Police.
- 5. Convicted felons are not tracked and once they pay their debt to society (fine or imprisonment), they are allowed to do whatever they want.

A copy of the latest law revisions is enclosed.

Exit Meeting

An exit meeting was conducted in Montevideo on July 7, 2000. The Uruguay participants were: Dr. Julio Barozzi, Director General de Servicios Ganaderos; Dr. Hector Lazaneo, MGAP Director; Dr. Ramon Cardinal, MGAP Deputy Director; Dr. Ronald Deutsch, Chief, Department of Slaughter; Dr. Victor Lyford Pike, Director of Laboratory; Mr. Servio Sallva, Chief Departmento Control Com. Inter.; Dr. Jorge Armstrong, Director de Dato Tecnico; Dr. Mario Serna Altesor, Director Estab. Ind.; Dr. Jorge Baldonia, Sub-chief Dept. Ind.;

Dr. Jorge Mattos, Supervisor MGAP; Dr. Pablo Nadal, Supervisor MGAP;

Dr. Alberto Cosos, Supervisor MGAP; Dr. Daniel Eutorsoy, Supervisor MGAP;

Mr. Roberto Infante, Lawyer MGAP; and Dr. M. Douglas Parks, Auditor USDA.

The following topics were discussed:

- 1. The Animal Health report and discussions produced the following information. The last outbreak of Foot and Mouth Disease (FMD), in Uruguay, was 1990. Vaccination stopped in 1994 and received disease-free status from APHIS and OEI in 1995. The neighboring countries stopped vaccination also, Brazil in April 2000 and Argentina in May 1999. Serological testing is an ongoing project at slaughter establishments. Over 20,000 tests are run per year as a surveillance safeguard. The laboratory methodology is validated by the Pan-Am FMD Center in Rio de Janerio, Brazil. The last outbreak of Newcastle was in 1984 and the last outbreak of Hog Cholera was in 1991.
- 2. The National Program for *Salmonella* sampling is handled a little different than the U.S. program. As follows: regardless of the number of animals slaughtered, one steer or heifer and one cow are selected for sampling once per week. A schedule of the dates is sent to the Inspection Service every three months. Ground product is not sampled unless it is for export. If a positive test is revealed testing is done on a daily basis.
- 3. The Country profile was completed and is enclosed.
- 4. The results of the on-site visits and the deficiencies found. The inspection personnel pledged that all of these problems would be corrected immediately. The problems in the two establishments that were classified as "re-review" were to receive immediate and special attention.
- 5. A lawyer of MGAP discussed compliance and enforcement.
- 6. A discussion of the status of species testing and the "Residue Questionnaire". And the current National Program for residue testing. It is in place and on schedule.
- 7. Results of the audit of the laboratory were discussed.

CONCLUSION

The inspection system of Uruguay was found to have effective controls to ensure that product destined for export to the United States was produced under conditions equivalent to those which FSIS requires in domestic establishments. Nine establishments were audited: seven were acceptable, and two were evaluated as acceptable/re-review. The deficiencies encountered during the on-site establishment audits, in those establishments which were found to be acceptable and acceptable/re-review, were adequately addressed to the auditor's satisfaction.

Dr. M. Douglas Parks International Audit Staff Officer (Signed) Dr. M. Douglas Parks

ATTACHMENTS

- A. Data collection instrument for SSOPs
- B. Data collection instrument for HACCP programs
- C. Data collection instrument for *E. coli* testing.
- D. Data collection instrument for Salmonella testing
- E. Laboratory audit form
- F. Individual Foreign Establishment Audit Forms
- G. Written Foreign Country's Response to the Draft Final Audit Report

Data Collection Instrument for SSOPs

Each establishment was evaluated to determine if the basic FSIS regulatory requirements for SSOPs were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument contained the following statements:

- 1. The establishment has a written SSOP program.
- 2. The procedure addresses pre-operational sanitation.
- 3. The procedure addresses operational sanitation.
- 4. The pre-operational procedures address (at a minimum) the cleaning of food-contact surfaces of facilities, equipment, and utensils.
- 5. The procedure indicates the frequency of the tasks.
- 6. The procedure identifies the individuals responsible for implementing and maintaining the activities.
- 7. The records of these procedures and any corrective action taken are being maintained on a daily basis.
- 8. The procedure is dated and signed by the person with overall on-site authority.

The results of these evaluations were as follows:

Est. #	1.Written program addressed	2. Pre-op sanitation addressed	3. Oper. sanitation addressed	4. Contact surfaces addressed	5. Frequency addressed	6. Responsible indiv. identified	7. Documentation done daily	8. Dated and signed
677	V	V	$\sqrt{}$	V	$\sqrt{}$	$\sqrt{}$	V	V
344	V	V	√	1	$\sqrt{}$	V	V	V
12	V	V	√	V	V	V	V	V
7	V	V	√	V	V	V	V	V
8	$\sqrt{}$	V		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	V	V
379	V	V	√	V	$\sqrt{}$	$\sqrt{}$	V	$\sqrt{}$
2	V	V	V	V	V	V	V	V
14	V	V	V	V	V	V	V	V
3	V	V	V	V	V	V	V	V

23	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	no	$\sqrt{}$
158	\checkmark	$\sqrt{}$	$\sqrt{}$	\checkmark	$\sqrt{}$	\checkmark	$\sqrt{}$	V
439	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
104	\checkmark	$\sqrt{}$	$\sqrt{}$	\checkmark	$\sqrt{}$	\checkmark	$\sqrt{}$	V
135	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
10	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
52	V	V	V	V	V	V	V	V
55	V	V	V	V	V	V	V	V

Data Collection Instrument for HACCP Programs

Each of the establishments approved to export meat products to the U.S. was required to have developed and implemented a Hazard Analysis – Critical Control Point (HACCP) system. Each of these systems was evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument included the following statements:

- 1. The establishment has a flow chart that describes the process steps and product flow.
- 2. The establishment had conducted a hazard analysis.
- 3. The analysis includes food safety hazards likely to occur.
- 4. The analysis includes the intended use of or the consumers of the finished product(s).
- 5. There is a written HACCP plan for each product where the hazard analysis revealed one or more food safety hazard(s) reasonably likely to occur.
- 6. All hazards identified in the analysis are included in the HACCP plan; the plan lists a CCP for each food safety hazard identified.
- 7. The HACCP plan specifies critical limits, monitoring procedures, and the monitoring frequency performed for each CCP.
- 8. The plan describes corrective actions taken when a critical limit is exceeded.
- 9. The HACCP plan was validated using multiple monitoring results.
 - 10. The HACCP plan lists the establishment's procedures to verify that the plan is being effectively implemented and functioning and the frequency for these procedures.
- 11. The HACCP plan's record-keeping system documents the monitoring of CCPs and/or includes records with actual values and observations.
- 12. The HACCP plan is dated and signed by a responsible establishment official.

The results of these evaluations were as follows:

	1. Flow diagram	2. Haz- ard an-	3. All hazards	4. Use & users	5. Plan for each	6. CCPs for all	7. Mon- itoring	8. Corr. actions	9. Plan valida-	10.Ade- quate	11.Ade- quate	12. Dat- ed and
Est.#	J	alysis conduct -ed	ident- ified	includ- ed	hazard	hazards	is spec- ified	are des- cribed	ted	verific. proced- ures	docu- menta- tion	signed
677	√	V	√	V	√	√	no	V	√	√	√	√
344	V	√	√	V	√	√	V	V	√	no	√	√
12	√	√	√	√	√	√	no	√	√	√	√	√
7	V	√	√	V	√	√	no	V	√	V	√	√
8	V	√	√	V	√	√	V	V	√	V	no	√
379	√	V	V	V	V	V	V	V	√	√	√	√
2	V	V	√	V	√	√	√	√	√	V	√	√
14	√	√	√	√	√	V	√	V	√	√	no	V
3	√	V	V	V	V	V	V	V	no	√	√	$\sqrt{}$

23	cold	storage	only									
158	√	√	√	√	√	√	√	√	V	√	√	√
439	√	√	√	√	√	√	√	√	√	√	√	√
104	√	√	√	√	√	√	√	√	√	√	√	√
135	√	V	V	V	√	√	V	V	√	√	√	V
10	cold	storage	only									
52	√	√	√	√	√	√	√	√	V	√	√	V
55	√	√	√	√	√	√	no	√	V	√	√	√

Data Collection Instrument for Generic E. coli Testing

Each slaughter establishment was evaluated to determine if the basic FSIS regulatory requirements for generic E. coli testing were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument contained the following statements:

- The establishment has a written procedure for testing for generic *E. coli*.
- The procedure designates the employee(s) responsible to collect the samples.
- The procedure designates the establishment location for sample collecting.

- The sample collection is done on the predominant species being slaughtered.
 The sampling is done at the frequency specified in the procedure.
 The proper carcass site(s) and/or collection methodology (sponge or excision) is being used for sampling.
- 7. The carcass selection is following the random method specified in the procedure or is being taken randomly.
- 8. The laboratory is analyzing the sample using an AOAC Official Method or an equivalent method.
- 9. The results of the tests are being recorded on a process control chart showing the most recent test results.
- 10. The test results are being maintained for at least 12 months.

	1.Writ-	2. Samp-	3.Samp-	4. Pre-	5. Samp-	6. Pro-	7. Samp-	8. Using	9. Chart	10. Re-
	ten pro-	ler des-	ling lo-	domin.	ling at	per site	ling is	AOAC	or graph	sults are
Est. #	cedure	ignated	cation	species	the req'd	or	random	method	of	kept at
			given	sampled	freq.	method			results	least 1 yr
677	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	\checkmark		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
344			$\sqrt{}$	\checkmark				\checkmark		$\sqrt{}$
12	\checkmark		$\sqrt{}$	\checkmark				\checkmark		$\sqrt{}$
7	\checkmark		$\sqrt{}$	\checkmark		\checkmark	$\sqrt{}$	\checkmark		$\sqrt{}$
8	\checkmark	$\sqrt{}$	$\sqrt{}$	\checkmark		$\sqrt{}$	$\sqrt{}$	\checkmark		$\sqrt{}$
379	\checkmark	$\sqrt{}$	\checkmark	\checkmark	no	\checkmark		\checkmark		$\sqrt{}$
2	V	$\sqrt{}$	V	V		\checkmark		V	$\sqrt{}$	V
14	V	$\sqrt{}$	V	V		\checkmark	$\sqrt{}$	V		V
3	V	V	V	V	V		no	V	V	V

23	cold	storage	only							
158	proces	only								
439			$\sqrt{}$	$\sqrt{}$		$\sqrt{}$		$\sqrt{}$		$\sqrt{}$
104	√	√	$\sqrt{}$			$\sqrt{}$	√	√	√	V
135	proces	only								
10	proces	only								
52			$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$			$\sqrt{}$	$\sqrt{}$
55			$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	$\sqrt{}$

Data Collection Instrument for Salmonella testing

Each slaughter establishment was evaluated to determine if the basic FSIS regulatory requirements for *Salmonella* testing were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument included the following statements:

- 1. Salmonella testing is being done in this establishment.
- 2. Carcasses are being sampled.
- 3. Ground product is being sampled.
- 4. The samples are being taken randomly.
- 5. The proper carcass site(s) and/or collection of proper product (carcass or ground) is being used for sampling.
- 6. Establishments in violation are not being allowed to continue operations.

The results of these evaluations were as follows:

	1. Testing	2. Carcasses	3. Ground	4. Samples	5. Proper site	6. Violative
Est. #	as required	are sampled	product is	are taken	and/or	est's stop
			sampled	randomly	proper prod.	operations
677	$\sqrt{}$	$\sqrt{}$	N/A	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
344			N/A		V	$\sqrt{}$
12		V	N/A		V	$\sqrt{}$
7	$\sqrt{}$	$\sqrt{}$	N/A	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
8	$\sqrt{}$	$\sqrt{}$	N/A	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
379	$\sqrt{}$	$\sqrt{}$	N/A	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
2	V		N/A	V		$\sqrt{}$
14	V	V	N/A	V	V	V
3	V	V	N/A	V	V	V

23	cold	storage	only			
158	processing	only				
439	V	$\sqrt{}$	N/A	$\sqrt{}$	$\sqrt{}$	
104	√	V	N/A	√	√	V
135	processing	only				
10	cold	storage	only			
52	V	V	N/A	V	V	V
55	$\sqrt{}$	$\sqrt{}$	N/A		$\sqrt{}$	$\sqrt{}$